=> b reg
FILE 'REGISTRY' ENTERED AT 15:12:51 ON 14 SEP 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 SEP 2004 HIGHEST RN 744170-41-0 DICTIONARY FILE UPDATES: 13 SEP 2004 HIGHEST RN 744170-41-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting  ${\sf SmartSELECT}$  searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d ide 118 tot

L18 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN

RN 500729-75-9 REGISTRY

CN Furo[2,3-d]-1,3,2-dioxaphosphole-6-carboxamide, tetrahydro-2,6a-dihydroxy-, 2-oxide (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C5 H8 N 07 P

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

- 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L18 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN

RN 500729-74-8 REGISTRY

- CN Boron, dihydroxy[tetrahydro-4-hydroxy-4,5-di(hydroxy-.kappa.0)-2-furancarboxamidato(2-)]-, (T-4)- (9CI) (CA INDEX NAME)
- MF C5 H9 B N O7

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L18 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
     66301-61-9 REGISTRY
RN
    Benzo[c]thiophene, octahydro-, 2,2-dioxide, (3aR,7aS)-rel- (9CI) (CA
CN
     INDEX NAME)
OTHER CA INDEX NAMES:
    Benzo[c]thiophene, octahydro-, 2,2-dioxide, cis-
CN
OTHER NAMES:
    cis-8-Thiabicyclo[4.3.0] nonane 8,8-dioxide
CN
FS
    STEREOSEARCH
    C8 H14 O2 S
LC
    STN Files:
                  BEILSTEIN*, CA, CAPLUS, CASREACT, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
DT. CA
      CAplus document type: Journal; Patent
      Roles from patents: BIOL (Biological study); PREP (Preparation); USES
RL.P
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)
Relative stereochemistry.
```

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 4 REFERENCES IN FILE CA (1907 TO DATE)
- 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 14:12:42 ON 14 SEP 2004)

FILE 'REGISTRY' ENTERED AT 14:12:46 ON 14 SEP 2004 DEL DEL882Q1/A ACT WED770S/A

L1 STR

L2 43 SEA FILE=REGISTRY SSS SAM L1

L3 SCR 2039 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 OR 2043 OR 205

L4 44 L1 NOT L3

L5 SCR 1838 L6 45 L1 AND L5 NOT L3

L7 STR L1

L8 STR L7

L9 SCR 1838 AND 2005

L12 0 L8 AND L9 NOT L11

FILE 'HCAPLUS' ENTERED AT 15:04:12 ON 14 SEP 2004

L14 1 US20040152669/PN

FILE 'REGISTRY' ENTERED AT 15:04:23 ON 14 SEP 2004

FILE 'HCAPLUS' ENTERED AT 15:04:25 ON 14 SEP 2004

L15 TRA L14 1- RN : 12 TERMS

FILE 'REGISTRY' ENTERED AT 15:04:26 ON 14 SEP 2004

L16 12 SEA L15

L17 7 L16 AND NR>=1

L18 3 L17 AND (C5H9BNO7 OR C5H8NO7P OR C8H14O2S)

FILE 'HCAPLUS' ENTERED AT 15:06:07 ON 14 SEP 2004

L19 4 L18

FILE 'HCAOLD' ENTERED AT 15:11:12 ON 14 SEP 2004

L20 0 L18

```
FILE 'HCAPLUS' ENTERED AT 15:13:35 ON 14 SEP 2004
                E COOPER S/AU
            152 E3, E20-21
L21
                E YAGER K/AU
L22
             22 E3, E11-13
                E COOPER STEPHEN/AU
            157 E3, E18-21
L23
              9 OUOREX/CS, PA
L24
              1 L19 AND L21-24
L25
              3 L19 NOT L25
L26
              3 L26 AND (PY<=2001 OR AY<=2001 OR PRY<=2001 OR PD<20010824 OR AD
L27
=> b hcap
FILE 'HCAPLUS' ENTERED AT 15:13:35 ON 14 SEP 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN. Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.
```

FILE COVERS 1907 - 14 Sep 2004 VOL 141 ISS 12 FILE LAST UPDATED: 13 Sep 2004 (20040913/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

## => d all hitstr 125 tot

US 2002-227327

A3

138:221708

2003:173445 HCAPLUS

Entered STN: 07 Mar 2003

L25

AN DN

TI

TN

```
Cooper, Stephen R.; Yager, Kraig M.
PA
     Quorex Pharmaceuticals, Inc., USA
so
     PCT Int. Appl., 29 pp.
     CODEN: PIXXD2
рт
     Patent
     English
LA
IC
     ICM A61K031-69
     29-7 (Organometallic and Organometalloidal Compounds)
     Section cross-reference(s): 1, 10, 25, 27, 28, 63
FAN.CNT 1
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                          ----
                                  -----
                                                                       20020822
                                 20030306
                                              WO 2002-US27154
     WO 2003018029
                           A1
         W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
             FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK,
             SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW,
             AM, AZ, BY, KG
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
                                                                       20020822
     US 2003105062
                                  20030605
                                               US 2002-227327
                           A1
                                  20040518
                           B2
     US 6737415
                                               EP 2002-759457
                                                                       20020822
     EP 1418923
                           A1
                                 20040519
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                  20040805
                                               US 2003-676770
     US 2004152669
                           A1
                                  20010824
PRAI US 2001-314683P
                           P
```

20020822

Preparation of antibacterial agents based upon oxyanion binding

```
20020822
     WO 2002-US27154
CLASS
 PATENT NO.
                  CLASS
                        PATENT FAMILY CLASSIFICATION CODES
 WO 2003018029
                  TCM
                          A61K031-69
                          A61K031/38; A61K031/381; A61K031/425; A61K031/66;
 US 2003105062
                  ECLA
                          A61K031/69
     CASREACT 138:221708; MARPAT 138:221708
GT
     OH
                                        II
     Oxyanion compds. I [E = B, P,S; T1, T2 = O, NR, CH2; R = H, C1-8-alkyl,
     C1-8-oxoalkyl; L = ethyelen, propylene, C4-6-alicyclic (cyclopentyl, cyclohexyl, pyrrolidine, THF, piperidine, pyran, dioxane, morpholine), aromatic (pyrrole, furan, pyridine, pyridimidine, pyrazine, imidazole,
     thiazole, oxazole, purine, indazole) are useful for treating bacterial growth. Thus, sulfone II was prepared from cis-1,2-cyclohexanedimethanol
     dimesylate via reaction with Na2S in DMSO followed by S-oxidation with
     monoperphthalic acid in Et20. The compds. may be used to treat bacterial
     infections in human beings and to regulate biofilm formation (no data).
     Pharmaceutical compns. comprising one or more such compds. are useful for
     treating bacterial infections in human beings (no data).
     antibacterial oxoanion prepn; bacterial infection human treatment
     oxoanion; microbial biofilm regulation oxyanion
IT
     Infection
         (bacterial, treatment; preparation of antibacterial agents based upon
        oxoanion binding)
IT
     Carbonates, preparation
     Sulfates, preparation
     Sulfites
     Sulfones
     Urethanes
     RL: AGR (Agricultural use); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (cyclic; preparation of antibacterial agents based upon oxoanion binding)
     Borates
     Phosphates, preparation
     RL: AGR (Agricultural use); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
         (esters; preparation of antibacterial agents based upon oxoanion binding)
IT
     Biofilms (microbial)
         (formation regulator; preparation of antibacterial agents based upon
         oxoanion binding)
IT
     Oxyanions
         (oxoanions; preparation of antibacterial agents based upon oxoanion binding)
     Antibacterial agents
IT
     Human
         (preparation of antibacterial agents based upon oxoanion binding)
     Amides, preparation
     Sulfates, preparation
     RL: AGR (Agricultural use); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
         (sulfamates, cyclic sulfamidates and sulfamidites; preparation of
         antibacterial agents based upon oxoanion binding)
IT
     Cyclic compounds
     RL: AGR (Agricultural use); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
         (sulfones; preparation of antibacterial agents based upon oxoanion binding)
     5329-14-6DP, Sulfamidic acid, cyclic derivs.
     RL: AGR (Agricultural use); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
         (cyclic; preparation of antibacterial agents based upon oxoanion binding)
     66347-68-0, cis-Cyclohexane-1,2-dimethanol dimethanesulfonate
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (cyclocondensation of, with sodium sulfide; preparation of antibacterial
```

agents based upon oxoanion binding)

54053-76-8P IT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and S-oxidation of; preparation of antibacterial agents based upon oxoanion binding) 2171-74-6P, o-Phenylene carbonate 57-13-6DP, Urea, cyclic derivs. 6303-21-5DP, Phosphinic acid, cyclic esters and amides 7803-58-9DP. Sulfamide, cyclic derivs. 10043-91-1DP, Phosphorodiamidic acid, cyclic derivs. 66301-61-9P, cis-8-Thiabicyclo[4.3.0] nonane 8,8-dioxide 500729-74-8P 500729-75-9P RL: AGR (Agricultural use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of antibacterial agents based upon oxoanion binding) 120-80-9, Catechol, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of antibacterial agents based upon oxoanion binding) THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT RE (1) Coddington; Journal of Coordination Chemistry 1989, V20(1), P27 HCAPLUS (2) Dale, J; US 3053880 A 1962 HCAPLUS (3) de Gray; US 3325262 A 1967 HCAPLUS (4) Degray; US 3564091 A 1971 HCAPLUS (5) Sagulenko; Viniti 1984, P4184 HCAPLUS

(6) Singer, M; US 3873279 A 1975 HCAPLUS

66301-61-9P, cis-8-Thiabicyclo[4.3.0] nonane 8,8-dioxide 500729-74-8P 500729-75-9P RL: AGR (Agricultural use); SPN (Synthetic preparation); THU (Therapeutic

use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of antibacterial agents based upon oxoanion binding)

66301-61-9 HCAPLUS

Benzo[c]thiophene, octahydro-, 2,2-dioxide, (3aR,7aS)-rel- (9CI) (CA CN INDEX NAME)

Relative stereochemistry.

RN 500729-74-8 HCAPLUS

Boron, dihydroxy [tetrahydro-4-hydroxy-4,5-di(hydroxy-.kappa.0)-2-CN furancarboxamidato(2-)]-, (T-4)- (9CI) (CA INDEX NAME)

500729-75-9 HCAPLUS RN

Furo[2,3-d]-1,3,2-dioxaphosphole-6-carboxamide, tetrahydro-2,6a-dihydroxy-CN , 2-oxide (9CI) (CA INDEX NAME)

```
=> d all hitstr 127 tot
```

GI

1995:58482 HCAPLUS AN DN 123:111417 Entered STN: 08 Nov 1994 ED Fragmentation patterns in the gas-phase pyrolysis of some bi- and tricyclic sulfolanes related to the 8-thiabicyclo[4.3.0]non-3-ene 8,8-dioxide ring system Aitken, R. Alan; Cadogan, J. I. G.; Gosney, Ian; Newlands, Stephen F. Dep. Chem., Univ. Edinburgh, Edinburgh, EH9 3JJ, UK Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1994), (16), 2301-8 CODEN: JCPRB4; ISSN: 0300-922X DT Journal English LА 22-8 (Physical Organic Chemistry) CC

ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

$$SO_2$$
 $I$ 
 $SO_2$ 
 $I$ 
 $SO_2$ 
 $I$ 
 $SO_2$ 
 $I$ 
 $SO_2$ 
 $V$ 
 $VI$ 

Depending upon the degree of ring strain, the thermal breakdown of AB cis-8-thiabicyclo[4.3.0]non-3-ene 8,8-dioxide (I) and related ring systems in the gas phase follows widely differing pathways. Decomposition of I occurs only under forcing conditions, resulting in complete fragmentation of the sulfolane ring to give benzene and toluene, while pyrolysis of the 2,5-bridged analogs II (X = CH2, CH2CH2) and III proceeds by a retro-Diels-Alder reaction at much lower temps. to give 1,3-dienes and the decomposition products of 3-sulfolene, buta-1,3-diene and SO2. Epoxidn. of the double bond in these compds. results in a marked change in their thermal fragmentation behavior; only SO2 is lost to produce novel divinyl epoxides. The corresponding N-(ethoxycarbonyl)aziridines, formed by photolysis of the unsatd. sulfones in Et azidoformate, undergo extensive decomposition on pyrolysis and do not yield any useful products. The saturated sulfone IV gives the expected octa-1,7-diene upon flash vacuum pyrolysis (FVP), but only under relatively severe conditions. Three isomeric diene sulfones (V and cis- and trans-VI) have also been examined and show a varied pattern of reactivity under FVP conditions. pyrolysis bicyclic tricyclic sulfolane; thiabicyclononene dioxide pyrolysis Thermal decomposition TT (flash, of bi- and tricyclic sulfolanes)

81872-47-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclization reaction with sodium sulfide)

3725-28-8, Bicyclo[4.2.0]octa-2,4-diene 1871-52-9, 1,3,5-Cyclooctatriene IT RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)

(formation in pyrolysis of thiabicyclononadiene dioxide)

74626-69-0 2434-67-5 IT

RL: RCT (Reactant); RACT (Reactant or reagent)

(oxidation of)

IT 165727-63-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and conversion to thiabicyclononadiene)

165727-57-1P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization reaction with sodium sulfide)

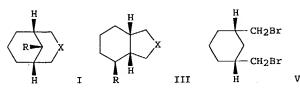
165727-64-0P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

```
(preparation and debromination of)
                   165727-56-0P 165727-68-4P
     165727-55-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and oxidation of)
     53292-01-6P 66301-61-9P 83947-07-3P 92688-77-2P 92688-78-3P 165727-65-1P 165727-66-2P 165727-67-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and pyrolysis of)
     86814-82-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and tosylation of)
                                               165727-61-7 165727-62-8
     165727-58-2 165727-59-3 165727-60-6
     RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
        (preparation of)
     2471-91-2P
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
                                            92688-88-5 95722-43-3
     98-59-9, Toluene-p-sulfonyl chloride
                   166019-65-4 166019-66-5 166019-67-6 166019-68-7
     166019-64-3
     166019-69-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (pyrolysis of)
     5675-13-8, trans-1,2-Dihydrophthalic acid
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reduction of)
     106137-27-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (tosylation of)
     66301-61-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and pyrolysis of)
     66301-61-9 HCAPLUS
RN
     Benzo[c]thiophene, octahydro-, 2,2-dioxide, (3aR,7aS)-rel- (9CI) (CA
     INDEX NAME)
```

Relative stereochemistry.

```
L27 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
     1984:6274 HCAPLUS
AN
DN
     100:6274
     Entered STN: 12 May 1984
ED
     Synthesis of cis-3-thiabicyclo[4.3.0] nonane and cis-3-
ΤI
     thiabicyclo[3.3.1] nonane
ΑU
     Volynskii, N. P.; Urin, A. B.; Gal'pern, G. D.
     Inst. Neftekhim. Sint. im. Topchieva, Moscow, USSR
CS
     Neftekhimiya (1983), 23(4), 542-7
CODEN: NEFTAH; ISSN: 0028-2421
SO
DΤ
     Journal
LA
     Russian
     27-15 (Heterocyclic Compounds (One Hetero Atom))
CC
os
     CASREACT 100:6274
GI
```



```
Treatment of cyclohexene with paraformaldehyde and HCl gave I (R = Cl, X =
AB
     O) (II) and III (R = Cl, X = O) (IV). Dechlorination of II by Na-MeOH
     gave I (R = H) whose pyran ring was cleaved by HBr to give V which was
     cyclized by Na2S to give I (R = H, X = S). Subsequent oxidation by 30% H202
     gave the corresponding sulfoxide and sulfone. A similar series of
     reactions with IV led to III (R = H, X = S).
     thiabicyclononane isomer; bicyclononane thia isomer; benzothiophene
ST
     octahydro
     30525-89-4
IT
     RL: PROC (Process)
        (addition of, to cyclohexene in presence of hydrochloric acid)
                  57702-85-9P
     13019-30-2P
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and cyclization by sodium sulfide)
     87947-22-6P
IT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and dehydrochlorination of)
TΤ
     13149-01-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and furan ring cleavage by hydrobromic acid)
IT
     50305-98-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and hydrogenation of)
                  54053-76-8P
     20742-48-7P
TT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and oxidation of)
     280-71-7P
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and pyran ring cleavage by hydrobromic acid)
     66301-61-9P 87947-23-7P 87947-24-8P 87984-60-9P
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
IT
     7639-10-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation, dechlorination, and dehydrochlorination of)
     110-83-8, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with paraformaldehyde in hydrochloric acid)
IT
     66301-61-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of)
     66301-61-9 HCAPLUS
     Benzo[c]thiophene, octahydro-, 2,2-dioxide, (3aR,7aS)-rel- (9CI) (CA
CN
     INDEX NAME)
```

Relative stereochemistry.

```
L27 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ΑN
    1978:169654 HCAPLUS
     88:169654
DN
ED
    Entered STN: 12 May 1984
    1,2-Dimethylcyclobutenes by reductive ring-contraction of sulfolanes:
ΤI
     cis-7.8-dimethylbicyclo[4.2.0]oct-7-ene
    Photis, James M.; Paquette, Leo A.
AU
     Dep. Chem., Ohio State Univ., Columbus, OH, USA
CS
     Organic Syntheses (1977), 57, 53-60
SO
     CODEN: ORSYAT; ISSN: 0078-6209
DT
    Journal
     English
LA
     24-7 (Alicyclic Compounds)
CC
```

GΙ

Treatment of cis-1,2-cyclohexanedicarboxylic anhydride with LiAlH4 in THF AR gave 98-100% cis-1,2-cyclohexanedimethanol, which was treated with MeSO2Cl to give 96-8% bis(methanesulfonate) I. Treatment of I with Na2S gave 68.0-70.5% II (R = H, N = 0), which was oxidized to give 92-5% II (R = H, n = 2) (III). Treatment of III with BuLi and MeS gave 29.5-37% IV. Six addnl. compds. , e.g. V and VI (R1 = H; R1R1 = bond), were prepared in 20-67% yield. redn ring contraction sulfolane; cyclobutene dimethyl; bicyclooctene dimethyl; tricyclic compd Ring contraction IT (reduction and, of sulfolane) IT Reduction (ring contraction and, of sulfolanes) IT 74-88-4, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (alkylation by, of octahydrobenzothiophene oxide) 124-63-0 RL: RCT (Reactant); RACT (Reactant or reagent) (esterification by, of cyclohexanedimethanol) 66301-61-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and alkylation of) 54053-76-8P IT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and oxidation of) IT 15753-50-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction with methanesulfonyl chloride) 66347-68-0P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction with sodium sulfide) 60090-27-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reductive ring contraction of) 53292-10-7P 53292-03-8P 53503-75-6P 53291-98-8P 53292-02-7P 66301-62-0P 61122-02-9P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) IT 13149-00-3 RL: RCT (Reactant); RACT (Reactant or reagent) (reduction of) 33802-56-1 41065-78-5 53292-00-5 IT 17853-54-2 24139-28-4 53292-09-4 RL: RCT (Reactant); RACT (Reactant or reagent) (reductive ring contraction of) 66301-61-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and alkylation of)

RN 66301-61-9 HCAPLUS CN Benzo[c]thiophene, octahydro-, 2,2-dioxide, (3aR,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

=> b home FILE 'HOME' ENTERED AT 15:18:20 ON 14 SEP 2004

Searched by Noble Jarrell